

## Product datasheet for **DM1047**

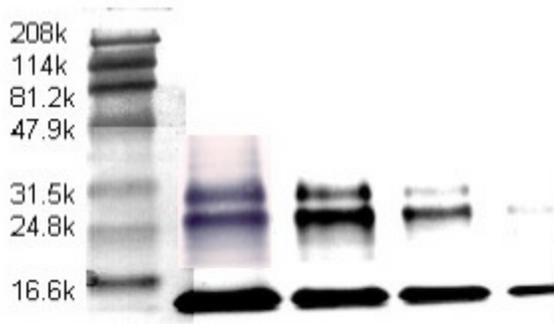
### TGF beta 1 (TGFB1) Mouse Monoclonal Antibody [Clone ID: TB21]

#### Product data:

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	TB21
<b>Applications:</b>	ELISA, FN, IHC, WB
<b>Recommended Dilution:</b>	<b>ELISA:</b> This antibody recognizes both Human platelet-derived and recombinant TGF-beta in ELISA. <b>Functional Assay:</b> This antibody neutralizes TGF-beta activity in vitro, in an inhibition assay of CCL/64 cell growth and neutralizes the growth promoting action of TGF-beta in the NRK-49F colony forming assay. The effect of micro-injection of this antibody into one blastomere of two cell stage Xenopus embryos indicated that it was able to neutralize effectively the bioactivity of TGF-beta <i>in vivo</i> . <b>Immunohistochemistry on FFPE and Frozen Sections:</b> This antibody has been used to demonstrate TGF-beta in ovine ovarian tissue and Human breast carcinoma at a dilution of 1/1000. As a consequence of the intense staining of the erythrocytes it is possible to locate a single cell within the ovarian stroma making it useful in locating very fine capillary networks within tissue. <b>Western Blotting:</b> 5-20 ng/ml will allow visualization of 100 ng/lane of TGF-beta. In another Western Blot experiment the antibody used at 5-20 ng/ml, detected TGF-β at 200 ng/lane.
<b>Reactivity:</b>	Human, Sheep
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	TGF-beta from Human platelets.



<b>Specificity:</b>	This antibody detects Transforming Growth Factor beta/TGF beta. Western blotting demonstrated that this antibody reacts with the dimeric (25 kDa) and monomeric (12.5 kDa.) forms of TGF- $\beta$ under both non-reducing and reducing conditions respectively. This antibody recognizes both human platelet-derived and recombinant TGF- $\beta$ in ELISA.
<b>Formulation:</b>	0.01M PBS, pH 7.0 without preservatives State: Azide Free State: Lyophilized purified IgG fraction
<b>Reconstitution Method:</b>	Restore in 0.5 ml double distilled water.
<b>Concentration:</b>	1.0 mg/ml (after reconstitution)
<b>Purification:</b>	Affinity Chromatography on Protein G
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Gene Name:</b>	transforming growth factor beta 1
<b>Database Link:</b>	<a href="#">Entrez Gene 7040 Human P01137</a>
<b>Background:</b>	TGF beta 1 (Transforming Growth Factor Beta 1) is a multifunctional peptide capable of influencing cell proliferation, differentiation, and other functions in a wide range of cell types. Transformed as well as non neoplastic tissues, release transforming growth factors; and essentially all cells possess a specific TGF beta 1 receptor. The multimodal nature of TGF beta 1 is seen in its ability to stimulate or inhibit cellular proliferation. TGF beta 1 plays a fundamental role in tissue growth and differentiation involvement in adipogenesis, myogenesis, chondrogenesis, osteogenesis, epithelial cell differentiation and immune cell function. The C-terminal 112 amino acids constitute the mature protein.
<b>Synonyms:</b>	TGFB, Transforming growth factor beta-1, TGF-beta-1

**Product images:**

Western blot result of the antibody used at 2ug/mL to detect platelet derived TGF- $\beta$  at 12ug/lane (lane 2) 6ug/lane (lane 3), 3 ug/lane (lane 4) and 1ug/mL (lane 5) with 4-chlorol-naphthol as substrate. The bottom band is the 12.5KD TGF- $\beta$  monomer, the mid-band is the 25KD TGF- $\beta$  dimer and the up band is TGF- $\beta$  with signal peptide. Lane 1 is molecular weight markers.